

**SOUTHERN CALIFORNIA
EDUCATION RESEARCH CENTER
FOR OCCUPATIONAL SAFETY AND
HEALTH**

SUMMARY ANNUAL REPORT

July 1, 2008 – June 30, 2009

**NIOSH Training Grant
No. T42 OH 008412**

**SUBMITTED BY:
JOHN R. FROINES
INTERIM CENTER DIRECTOR
UCLA
LOS ANGELES, CA 90095-1772**

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Southern California ERC Summary Annual Center Report for 2008-2009

A. Center Administration: The Region IX NIOSH ERC for Southern California ERC (SCERC) is composed of three academic programs: occupational medicine (OM), industrial hygiene (IH), and Occupational and Environmental Health Nursing (OEH). The occupational medicine program is located at University of California Irvine (UCI); all other programs are at University of California, Los Angeles (UCLA). Other programs are a Continuing Education program (CE), an Outreach (OR) program, Center Administration (CA), a Hazardous Substances Academic Training program (HSAT), a Pilot/Small Project Research Training program (PSP), and a Hazardous Substances Training (HST) program and a Targeted Research Training program (TRT). Center administration is located at UCLA.

1. Coordination and Integration of ERC Programs

Currently the SCERC is directed by Dr. John R. Froines, who will serve as Acting Director until a permanent replacement is identified. The Associate Director is Dr. Dean Baker of UC Irvine and the ERC Administrator is DT Evans. Former Director, Dr. William Hinds retired effective July 1, 2009 and a search is underway to replace him. Dr Hinds will continue his involvement with the ERC, serving in an advisory capacity in addition to teaching and conducting research. Six people constitute our executive committee. Community views have been sought to guide the ERC toward new or improved educational programs for both professional training and continuing education. The primary productivity assessment is the number of graduates and the number of publications for each academic program. For CE/O it is the number of courses offered and the number of attendees.

2. Strategic Planning

During this past year the SCERC undertook the following strategic planning process to implement the ERC mission and Vision statement, adopted in March 2004.

Core Purpose and Mission: The mission of the SCERC is to protect the health of workers through education, research, and service by educating professionals in the fields of occupational medicine, industrial hygiene, and occupational health nursing through academic programs and continuing education; conducting research in occupational and environmental health and related areas; and providing outreach and resources to educational and professional organizations.

Vision: The vision of the Southern California ERC is to be recognized as a leader in education and research in occupational and environmental health.

Trainees tour an industrial facility. This continues to be a popular activity with students. This year it was Exide Battery. We continue to organize the annual interdisciplinary dinner meeting at the UCLA faculty Center with an outside speaker.

B. Center Programs: **Industrial Hygiene:** The major accomplishment of the UCLA Industrial Hygiene Program from 2008-9 was to graduate four Master's IH students (two of them also being HSAT students), and one doctoral student. The Master's students were employed almost immediately and the doctoral student began her search for a research position. One other Master's student transferred into the Ph.D. program. The quality of our students was recognized by Karen Hirakawa winning a Liberty Mutual Fellowship from the American Industrial Hygiene Foundation and another, Sayaka Takaku, winning a UCLA School of Public Health annual award, the Samuel J Tibbetts Fellowship. Faculty quality was also recognized, William C Hinds delivering the Donald Cummings Memorial Award at the 2009 AIHCE, and Shane S Que Hee winning the Best Research Paper Award in Industrial Hygiene for 2008, this being conferred by the Michigan Industrial Hygiene Association and the Toronto AIHCE. Shane Que Hee also was Chairperson of the AIHA Biological Monitoring Committee. Professor Shane Que Hee became the new Director of the IH Program. The IH program was reaccredited by ABET for another 5 years.

Occupational Medicine-UCLA: UCLA OM continued its relationship with the ERC in the 2008-9 year. The program trained a resident physician, conducted research, provided direct clinical and workplace service.

Clinical services were provided in two settings: UCLA OM clinic and at Kaiser facilities. The UCLA clinic serves as a regional resource for complex cases and novel problems. It has particular

expertise in occupational lung disease, toxicology, and ADA issues. The Kaiser facilities emphasize front-line clinical care of injured/ ill workers. Residents are afforded progressively greater responsibility in this multiyear continuity clinic location.

Institutional support was limited. The Family Practice Dept and the ERC recommended closing the UCLA OM residency after the current trainee graduates in 6/10.

Occupational Medicine-Irvine: The UCI Occupational Medicine Residency program has maintained full accreditation by the ACGME. Three residents were supported by NIOSH, one received a National Occupational Physician Scholarship (OFSF), and one was supported by the US Navy. The program accepted four residents for the next training period and will train six residents. For more than a decade, one hundred percent of entering residents have graduated from the program, taken and passed the APBM board certification in occupational medicine, and now practice as occupational medicine specialists. The program graduates account for a substantial proportion of the board certified occupational medicine specialists in Southern California.

The UCI Occupational Medicine program also provides one-month rotations to Internal Medicine and Family Medicine residents at UCI and to occupational medicine residents from other programs who do 1-2 month rotations with us. The faculty serves as mentors for the undergraduate Biological Sciences Minority Science Program. The program also provides a CME approved Grand Rounds on occupational medicine as part of the ERC outreach mission. The program collaborated with the CE/O Program to organize and teach CE conferences on work organization and psychosocial stress, and also on the Health Effects and Management of Mold. Dr. Dean Baker was elected president of the International Society for Environmental Epidemiology, which is the largest international professional society in this field. Dr. Peter Schnall continued to serve as chair of the Committee on Work and Cardiovascular Disease of the International Commission on Occupational Health. Dr. Leslie Israel was elected as a board member of the Western Occupational and Environmental Medicine (WOEMA) and serves as the chair of the WOEMA education committee. Dr. Ulrike Luderer was appointed by the California State governor as a member of the Environmental Contaminant Biomonitoring Program Scientific Guidance Panel

Occupational Nursing: There is a grave shortage of nurses practicing with specialty workplace health and safety education in Southern California. The SCERC Occupational and Environmental Health Nursing (OEHN) program at UCLA is the only Masters level degree granting occupational health nursing specialty program in Southern California. Graduates have a unique perspective framed within the interdisciplinary academic structure of the NIOSH ERC. Training activities include didactic and clinical practicum rotations that culminate in a Masters of Science in Nursing (MSN) within two specialty tracks: OEHN Administration or OEHN Adult Nurse Practitioner.

Two initiatives of note for this academic funding year relate to preparing doctoral level nurses with specialty education in worker health and safety. First, we leveraged our resources for doctoral training in occupational health and safety by interfacing with another educational program in the School of Nursing recently funded by a HRSA grant (L. Phillips, PI). The HRSA grant supports fast track BS to PhD for students who integrate gerontology content throughout their academic preparation. This is creating a pipeline for PhD students interested in the aging workforce. Second, the OEHN program began laying a foundation for a PhD in OEHN within the SC ERC by enrolling two students who will focus their PhD study in the area of workplace health and safety.

NORA: The NORA Research Support Program (NORARS), which has now been revised as the Targeted Research Training (TRT) Program, is a joint program of the UCLA and UC Irvine campuses. The Program uses several strategies to enhance research training and awareness of NORA, including (a) provide administrative and technical research support within the SCERC; (b) coordinate interdisciplinary research; (c) train graduate students who do projects with a NORA focus; and (d) organize and teach continuing education and outreach programs related to NORA research.

During the project period, the NORARS program provided technical support for NORA research training for doctoral students in the Industrial Hygiene core program through the purchase of supplies, machine shop services, and laboratory analyses that are being used for NORA research training. The program continued to provide support for NORA-related research by industrial hygiene doctoral students. Doctoral students received support during the reporting period for the following projects: Airborne

Manufactured Nanoparticles in the Workplace; Ultrafine Particles and Cooking Stoves; and, Ultrafine Particles and Welding.

The NORARS program has provided research training in ERC courses. A focus of the training has been the SCERC initiative in work organization and workplace psychosocial factors. Dr. Schnall and Dr. Baker have provided lectures to the graduate students from Industrial Hygiene program, Occupational Health Nursing program, and Occupational Medicine Residents. In addition, Dr. Schnall taught two elective courses at UCLA and at UCI. The SCERC initiative on WO&PS has conducted research projects that have provided an opportunity for SCERC trainees (IH masters students and UCI OM residents) to participate in field research

Examples of outreach meetings include presentations at the California Work and Health Study Group to present NORA-related research on work organization and psychosocial factors. The program also provided support for a continuing education conference on the evaluation, health effects, and management of mold that was offered at UCLA. This program was organized by the ERC CE/O program in collaboration with the NORARS program.

CE/O: In 2008/09 the CE/O Program launched a new Workplace Safety and Health Professional Certificate. This comprehensive yet flexible program provides certificate candidates with a thorough understanding of the challenges of workplace safety and health and the knowledge to be able to mitigate and/or overcome them. In addition to the basic certificate, candidates can elect an Advanced or a Hazardous Substances specialty.

Our monthly ergonomics webinar, which began in 2008, was expanded to two series -- Basic/Intermediate and Advanced. For one hour each month, attendees from all over the country participate in classes with the course director and guest speakers.

During this period the CE program completed a 3-year grant from The California Wellness Foundation (TCWF) to train health care providers, employer, supervisors and workers in illness and injury prevention for low wage service workers. We received another 3-year grant from TCWF to continue our injury and illness prevention courses for hotel housekeepers, janitors and kitchen workers. We also completed a Susan Harwood Training Grant from OSHA to provide business planning training to survive and reduce exposure to pandemic flu.

Highlights

- Occupational Health and Safety Principles and Nursing Certification Review -- We are now offering this course directly.
- Completed training of more than 1,350 workers, EHS professionals and supervisors in planning to survive pandemic flu.
- Conducted injury and illness prevention for low wage service workers in English and Spanish.

In 2008/09 we expanded training even more widely in Region IX. For the pandemic flu training, we had 18 participants in Hawaii, 58 in Arizona, and 134 in Nevada. We also expanded the locations of other classes throughout Southern California.

Our use of webinars has increased our ability to reach participants in other states. The ergonomics webinar is attended by participants in states as far away as New Jersey and also British Columbia. The pandemic flu webinars were attended by people from Maine to Hawaii.

Pilot Projects: Our Pilot/Small Project Program completed another successful year. Again, we received 12 applications for the most recent cycle and funded 5 impressive projects. Since its inception in 1999 our PSP Program has funded 41 project covering 21 NORA areas.

07-08 Academic Program data

Program	IH/(HSAT minor)	OMR	OEHN
Graduates	5(2)	3	6
Trainees	12(4)	6	14

07-08 CE Program data

Total # of Courses	116
Total Trainees	2,658